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BUSINESS BUDGETING

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BUSINESS BUDGETING

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Circulation Manager ..... M. C. Aichholz
P. O. Box 1, Covington, Ky.

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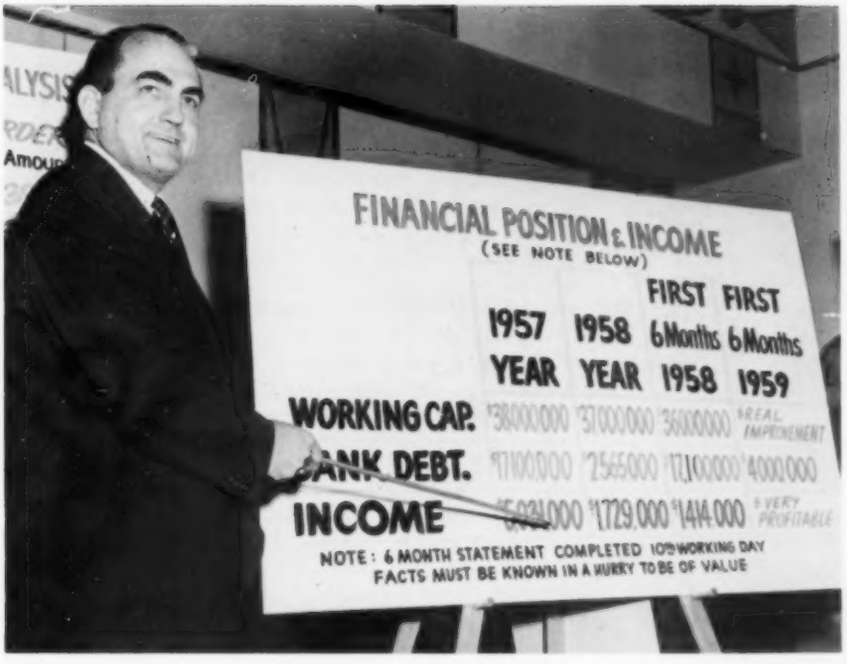

FINANCIAL POSITION & INCOME
(SEE NOTE BELOW)
1957 YEAR
1958 YEAR
FIRST 6 Months 1958
FIRST 6 Months 1959
WORKING CAP.
INCOME
NOTE: 6 MONTH STATEMENT COMPLETED 10TH WORKING DAY
FACTS MUST BE KNOWN IN A HURRY TO BE OF VALUE

PROFIT PLANNING

J. Russell Duncan, President
Minneapolis-Moline Company
Addressing The Ninth Annual
NSBB National Conference
At Minneapolis, Minn. – May, 1959

"Making a Profit" is a favorite subject for Mr. Duncan to discuss. All successful commercial business revolves around the ability of business to "Make a Profit". The author, of course, doesn't stop here, he goes a step forward by insisting that business make, not only a profit, but sufficient profit to provide an adequate return on the net invested Capital. Mr. Duncan states that top management must not abdicate its responsibiltiy to provide leadership and strong backing to the budgeting and planning personnel, but, he also emphasizes that budget men must be "Imaginative, Inquisitive, and Forceful," in order to awaken the organization to the very real profit potential of sound planning through sound Budgeting.

"PROFIT PLANNING"

The forces at work within today's dynamic economy are almost as complicated and unpredictable as those in the field of cosmic research. Rapidly advancing technology, shifting social adjustments, unnatural influences and regulation of the economy dictate the necessity for greater development of proficient planning. Management can no longer risk running an enterprise based upon intuition, generalities, and day-to-day plans.

The rewards of planning are well worth the extra effort. A dramatic illustration is the Minneapolis-Moline story. The company has progressed from a $5,031,000 loss in 1957, a $1,729,000 loss in 1958, a loss of $1,414,000 in first half 1958, and finally a first-half profit in 1959 very substantially in excess of $1,000,000. Working capital has also improved impressively over 1957 and 1958. Furthermore, even though sales volume is up and the company in its peak season, short-term bank loans stand as low as $4,000,000 versus $17,100,000 at this time last year. The invested capital of Minneapolis-Moline is beginning to turn at a favorable rate. The organization is diligently working to attain its goal, a good return on the net invested capital.

FINANCIAL POSITION & INCOME

(See note below)

	1957 Year	1958 Year	First 6 Months 1958	First 6 Months 1959
Working Capital	$38,000,000	$37,000,000	$36,000,000	$ Real Improvement
Bank Debt	17,100,000	2,565,000	17,100,000	4,000,000
Income	(5,031,000)	(1,729,000)	(1,414,000)	Very Profitable

NOTE: 6-month statement completed 10th working day.
Facts must be known in a hurry to be of value.

CHART 1

These results accomplished by the Management team at Minneapolis-Moline are a testimony to the importance of planning and, of course, the application of some hard work by all personnel.

YOU CAN'T CHART A COURSE WITHOUT DETERMINING A DESTINATION . . . one must first have a clear conception of the results desired and then plan the way to accomplish them. Planning cannot be day-dreaming, wishful-thinking, and dealing in unrealistic ideas. "Profit planning" involves realism, hard work, constant re-evaluation, and dynamic action. "Profit planning" incorporates the following esentials:

1) Management's intimate participation.
2) competent individuals property matched to functions,
3) responsibilities fixed,
4) a sound approach to planning (budgeting),
5) an adequate system of accounting,
6) clear communication, and
7) motivated people doing the jobs.

These are the essentials of planning that I will explore, with the hope that new thinking will be provoked about this most important modern business tool. One of the major battlegrounds in the future industrial cold war of competition will be in the zone of budgeting and planning; to survive we must have the ability to look ahead, the ability to be bold and take action, and a passionate desire to avoid subsidy and to continue to be extremely competitive.

TOP MANAGEMENT'S INTEREST IN PLANNING

Successful planning requires that Management take an active interest in planning and budgeting and to be intimate with the details. The modern theory that "Management cannot get into details" does not hold water in this case. Passing on the complete responsibility to the head of the Budget Department will not produce the desired profit results. Top Management and the Budget Manager must perform as "hand in glove". A great conductor cannot successfully lead a symphony without intimate knowledge of the score.

Top Management, like the conductor, must have detailed knowledge in order to work closely with all departments, because the large dollar errors stem from lack of information, poor iudgment, dealing in generalities, lack of definite objectives, poor timing, and inadequate attention on the part of Management. Top Management in a large enterprise is responsible for the million-dollar decisions . . . the release of a million dollars of material, labor, and burden . . . the make-or-break decisions.

The minor dollar errors are generally traceable to the other personnel and clerical employees -- the one hundred dollar mistakes . . . the thousand dollar mistakes . . . those that the company can "rock and roll" with. The production control department may order too many nuts, bolts, or screws - but these are, in most cases, not disastrous errors.

Top Management must make the big dollar decisions; these are the decisions that affect the rate of turnover of capital and result in profit or loss. The clerk is not responsible for playing the grain futures market in a large milling operation or the authorizing for production thousands of tractors in a farm-equipment plant. Top Management must not evade this responsibility.

BUDGET MUST HAVE AUTHORITY

The close integration of Management and the Budget (planning) Department can produce miracles. The Budget Department must be given stature and the support of Top Management. The BUDGET itself, having realistic goals and logical steps with which to accomplish them, must have authority. It must not be just a handsome document full of accounting gyrations. The line organization must be accountable for results falling short of the budget or plan. The Manager of the Budget Department must be imaginative, inquisitive, and forceful. He must not only deal in figures but it is his duty to highlight variations, suggest courses of action, watch trends, and anticipate. He must not wait for the Boss to suggest. This presumes a dedicated and studious Budget Department. It is a part of Management's participation to be certain that qualified personnel staff the Budget Department. Let me reiterate that planning and/or budgeting cannot be successful unless its importance is emphasized by Top Management.

Successful planning requires competent individuals properly matched to job functions. Positions must be properly defined, then staffed with interested, capable, hardworking individuals. You have heard some managements state they do not believe in organization charts. Well, in my opinion, they are absolutely necessary for properly placing the right people in the right jobs and defining individual responsibility without a shadow of a doubt.

The human element is the difference between the success and failure of a plan or budget. The human mind out-perfromed the I.B.M. 650 computer in selecting the Kentucky Derby winner, and the winning horse required the judgment and administration of a human jockey. A plan or budget will be only as successful as the capabiliti.s of the people compiling the program and administering it.

CHECKS AND BALANCES

The most successful plan is one administered by competent people properly placed in the organization. Checks and balances upon the human equation should be used. It is not always wise to let the task master set his own task; for example, Department Managers furnishing their own budget without audit. Remember, the sales or revenue section of any budget is critical. Sales plans must be determined by competent marketing personnel who not only understand statistics, comprehend markets, but also have a thorough knowledge of accounting functions. Sales forecasts must not be overly influenced by a desire to keep a plant in operation and void unabsorbed factory burden.

Successful planning requires that responsibilities for execution of the various components of the plan must be fixed. Duties must be clearly defined. "Passing the buck" is American industries' most wasteful past-time. Another comedy is the organization "popularity contest" where unpleasant facts are avoided by operating personnel.

We are running profit-making institutions, and we must compete not only at the domestic level but at the international level. Sales, manufacturing, and financial planning must all be coordinated. The Management team must check reports and figures, listen to personnel from every department, determine what is important, then evaluate and forecast. It must be clearly understood who is responsible for each part of the overall plan, who then compiles the various data into a complete package, who finally evaluates and endorses the plan. After this, responsibility for taking action and carrying out the program must be crystal clear. Responsibility for meeting sales quotas, controlling expenses, controlling inventories, collections, and disbursements must all be clearly defined. Plans are of no value in operating a business unless responsibility is placed for the successful execution of each phase and element of the plan.

The Budget Manager, as stated previously, should be given greater stature and responsibility. The way to evaluate and develop an organization is to place responsibility. The areas of control must be fixed. Forcing a profit or meeting a plan stems from control; that is, checking performance and results, regulating the speed and movement of a plan, correcting the plan to changing conditions, and constantly looking ahead.

PLANNING BASED ON FACTS

Successful planning requires the company to have a sound, practical approach to planning based upon facts – not generalities. I would like to break the approach down into six points.

FIRST – Management must clearly establish short and long-term balance–sheet and profit objectives for the company.

At Minneapolis-Moline, we believe that balance-sheet objectives should relate to i) return on net invested capital, and ii) capital turnover. The true measurement of an operating plan is the resulting return on "net" capital invested in the enterprise. The yardstick for measuring the adequate return is the comparison with the yield on competing investment opportunities, such as savings accounts, government bonds, equity stocks, real estate, etc. This is the true test of a profit plan . . . return on the net invested capital. Planning must include the determination of the correct return to bring it in line with companies in the same industry and other investment opportunity.

RETURN OF INVESTMENT

vs.

RETURN ON SALES

	----------000 omitted ----------		
	Company A (Grocery)	Company B (Aircraft)	Company C (Engines)
Net Stockholders' Equity	$ 16,400	$ 22,000	$ 32,500
Net Sales	200,000	86,200	71,300
Earnings Before Taxes	4,800	10,100	14,500
Net Earnings	2,200	4,800	6,600
% Return on Sales			
Earnings Before Taxes	2%	12%	20%
Net Earnings	1%	6%	9%
%Return on Investment			
Earnings Before Taxes	29%	46%	45%
Net Earnings	13%	22%	20%

CHART 2

After determining the realistic return required, projected balance sheets should be developed month by month, to be used as a means of forcing operating plans to remain within balance-sheet tolerances. This will provide a plan for proper capital turnover having a great effect upon return on net investment. In my opinion, operating plans should not be finalized without first attempting to project the desired balance-sheet results, and then working the new program within these "go and no go" tolerances. For example, a balance-sheet estimate would not plan inventory accumulation in an off-sales season, whereas an operating plan worked up independently of these tolerances may give such a result to the balance sheet . . . obviously, such figures would have to be reworked. It is a case of how much business the company should do, rather than how much the business would like to do . . . . . sound objectives.

Profit objectives must be compared to carefully determined industry statistics and the past cost records of the business. Periodic cost checks should be made on the major products sold by the company. This can be done by seeking competitive bids and by careful cost and margin studies. Many plants continue to operate even though the items could be purchased cheaper elsewhere than manufacturing them. Bricks and mortar and machinery are attractive only when they enable one to earn a proper return on the net investment. Profit objectives cannot necessarily be determined by past history.

In summary, company objectives must be related to return on net invested capital, capital turnover, and a realistic net profit. Objectives should be broken down as to short-term and long-term, so as to determine what should be emphasized.

SECOND – Planning and Budgets should "tie in" with the company's accounting system. Standard account numbers should be utilized – forms for gathering facts and compiling budgets should be similar to those used for general accounting. Sales information should be gathered by division, by territory, by product groups. Manufacturing facts should be gathered on the basis of material, labor, and burden allocated to product groups and by models. Burden should be carefully broken down and differentiated between fixed and variable to assist in separating the knowns from the unknowns and to eliminate distortions. Engineering expenses and appropriation should be allocated by product groups and models. Expenditures should relate to sales and the return on the investment in additional engineering of the product. General and administrative requires very little comment, except to state that at Minneapolis-Moline we permit the other departments to charge the cost of excess plant and real estate held for investment to G&A. Plans, in other words, must tie in with the control system devised by the company which facilitates the intelligent utilization of the information.

THIRD – Planning and budgets should tie in wherever possible with incentive. Money moti-

vates! For example, eleven sales divisions have been established at Minneapolis-Moline. These operate as separate distributorships, with their own balance sheets, charged with making a profit, using the regular distributor discount. A program is developed for each one of these divisions. The Division Manager and Assistant Manager are compensated handsomely for obtaining the proper return on the net invested capital within the respective division. These programs tie back to the sales, cash flow, expenses, and investment plans of the overall company.

FOURTH – in planning one must consider the "LEVERAGE" in the figures being used. By "leverage", at Minneapolis-Moline we mean the rearrangement of figures from the largest to the smallest to facilitate Management placing effort in areas which will produce the most significant result. In other words, put the pressure where it counts. The chart shows a hypothetical example of the application of this approach.

Accuracy of a plan or the effectiveness of Management can be made more certain when the theory of "leverage" is applied to building up a plan.

EXAMPLE of EXPENSE ANALYSIS

(000 omitted)

EXPENSE STATEMENT ORDER

Acct. No.	Acct. Description	Amount
10	Salaries	$390,000
20	Clerical & Technical Hourly	315,000
30	Material Handling Labor	395,000
40	Maintenance Labor	260,000
50	Setup Labor	250,000
60	Drilling & Turning Tools	75,000
70	City Gas	105,000
80	Payroll Taxes	160,000
90	Real & Personal Property Taxes	280,000
100	Depreciation	660,000

DESCENDING DOLLAR ORDER

Acct. No.	Acct. Description	Amount
100	Depreciation	$660,000
30	Material Handling Labor	395,000
10	Salaries	390,000
20	Clerical & Technical Hourly	315,000
90	Real & Personal Property Taxes	280,000
40	Maintenance Labor	260,000
50	Setup Labor	250,000
80	Payroll Taxes	160,000
70	City Gas	105,000
60	Drilling & Turning Tools	75,000

CHART 3

EXAMPLE of SALES ANALYSIS

(000 omitted)

STATEMENT ORDER

Product Line	Amount
1 Tractors	$21,900
2 Harvestors-Grain	2,350
3 Harvestors-Cotton	320
4 Corn Huskors	2,500
5 Corn Shellers	1,540
6 Hay Balors	175
7 Planters	470
8 Cultivators	375
9 Plows	1,210
10 Harrows	1,020

DESCENDING SALES CONTRIBUTION

Product Line	Amount
1 Tractors	$21,900
4 Corn Huskors	2,500
2 Harvestors-Grain	2,350
5 Corn Shellers	1,540
9 Plows	1,210
10 Harrows	1,020
7 Planters	470
8 Cultivators	375
3 Harvestors-Cotton	320
6 Hay Balors	175

DESCENDING GROSS MARGIN CONTRIBUTION

Product Line	Amount
1 Tractors	$ 5,300
2 Harvestors-Grain	570
4 Corn Huskors	450
5 Corn Shellers	380
9 Plows	280
19 Harrows	225
3 Harvestors-Cotton	78
7 Planters	72
6 Hay Balors	42
8 Cultivators	40

CHART 4

FIFTH Plans and budgets should be based on basic facts where possible, not necessarily on historical data. Many times it is far more satisfactory to ignore the company books and reconstruct the figures based upon basic information.

For example, the company may experience a sales increase but may not be obtaining the proper share of the industry potential. Territory potential basic information is a more accurate yardstick than the historical sales of the salesmen involved. Payrolls can be checked by making an independent study of the organization requirements and arriving at a manning table, in the same manner required if a new plant were being started up. This was the method employed when studying Minneapolis-Moline overhead payroll. Too great a reliance on comparisons with the company's internal figures may create the image of those mistakes. Plans should be based on complete knowledge of the industry and company figures and basic yardsticks established. Bench marks, such as industry sales and profits, can be a most valuable means of auditing a plan . . . basic facts and information.

SIXTH – Plans must be well timed to seasonal influences and trends. For instance, in the farm-equipment business, the spring planting and the fall harvest obviously affect the sales statistics and the product mix. The same is true in other businesses. For example, in the television and radio business, the high-priced models and related styles sell at Christmas, and the portable, competively priced items sell in the summertime. Planning must take into consideration monthly variations and long-term trends. These facts influence product mix, prices, and inventory accumulation. Timing must be stressed . . . why run a race after the race is finished?

SUMMARY

In summary, the practical approach to planning involves 1) establishment of long and short-term objectives, 2) tying in plans with the company's accounting system, 3) linking planning to the employees' incentive where possible, 4) the use of the "leverage theory" to verify facts and to direct effort, 5) the use of basic data rather than relying too much on historical information, 6) relating the plan to market potentials and seasonal influences, and 7) adherence to the philosophy of proper return on the invested capital.

Successful planning requires an adequate accounting system. The reasons for this are obvious to all of you. Accounting reports provide information for planning purposes and furnishes the basis of control. It is also important that an adequate procedure of work for preparing budget and planning purposes be established. Routine insures consistency, and the routine allows the executives time for more important study. Modern planning and business management cannot tolerate an inadequate accounting system. The system must assure timely reporting.

Successful planning requires clear communications. Achieving understanding of instructions and plans by employees always presents problems. Constant policing and explaining of the plan by the Budget Department must be carried out. The clearer the understanding of the plan, the more effective it will be. Be specific in presenting facts . . . don't deal in generalities. Don't be afraid to get to know the supervisors who are on the firing line; they can give the Budget Manager interesting "feed back". In the long run, only through good communications can a sound plan attain success.

Successful plans require motivated people doing the jobs. Realistic objectives will create enthusiasm. Interested leadership will stimulate. Napoleon had a poorly equipped army, but he inspired enthusiasm in his men. Top Management must furnish progressive leadership to put the plan across.

THOUGHTS WORTH REMEMBERING

In conclusion, here are a few thoughts worth remembering when you are planning for profits: Be sure you have a plan -- We have a 12-month and a 5-year plan, through 1963 . . . Don't talk about plans, use them. Aim at the correct return on the net invested capital. Enlist Top Management's active interest in planning and budgeting. Be certain that competent individuals with fixed responsibilities assist you. Base your plans on sound information and realistic objectives. Assure the success of your plan by proper controls. And, last but not least, don't forget the leverage theory . . . it is a practical and quick method of bringing results and producing profits – the thing that no business can do without.

Charles J. Kushell, Jr.
Financial Vice President
Montgomery Ward & Co., Inc.
Addressing the Ninth Annual
NSSB Conference

MODERN BUDGET CONCEPTS IN MULTI-UNIT RETAILING

Have you ever been faced with the problem of revitalizing a company which had not kept pace with its competition? The problems are "out-of-this-world", but for a "down-to-earth" review of the steps which Montgomery Ward has utilized to date and planned for the future you won't find a better source than this article by Mr. Kushell. While the outline of plans specifically apply to Montgomery Ward, the lessons to be gained are universal in application.

Montgomery Ward fits the definition of a chain retailer and it must be obvious to all that in the rebirth of Montgomery Ward, much work must have been done in the area of modern budget concepts. I would like to confine my discussion to the philosophy of budgeting rather than the detailed techniques. Frankly, this intrigued me inasmuch as I have spent a great deal of my time in the past two years in the development and acceptance of a budgeting philosophy at Wards.

There is a temptation to review much of the rich and exciting history of Wards over the past 87 years, but I know that your interest, like mine, lies more in the future than in the past. Permit me but a brief recital of the facts, as they existed when John Barr was elected Chairman and President of Wards in May of 1955, as background for a fuller understanding of the kind of philosophy we have developed.

During the years of inflation and rising prices immediately following World War II, Montgomery Ward had followed an anti-expansion policy in anticipation of a severe depression. No new stores were established and improvements in existing stores were rigidly restricted. With its own retail structure marking time while its competitors continued to expand, Wards began losing its traditional trade position. From 1931 to 1947, during the periods of the depression and the war, Wards sales increased from .27 of 1% of the gross national product to 1/2 of 1% of the gross national product. Then, beginning 10 years ago, Wards sales position declined as related to gross national product, from 1/2 to 1/4 of 1%.

This loss of trade position was a reflection of these underlying facts:

1. The number of stores in operation declined from 621 in 1948 to 568 in 1955, and sales declined from $1,212,000,000 in 1948 to $887,000,000 in 1954.
2. No new stores were built or acquired after 1941, and none of the old stores were relocated to meet changing market conditions.

3. In general, the stores had not been improved and modernized from the standpoint of lighting, floors, paint, air conditioning, vertical transportation, display fixtures, etc.
4. The company's system of warehousing and distribution was antiquated and inadequate.
5. Most significantly, a large number of competent management people had left Wards during the seven years following 1948, and had not been adequately replaced.

On the plus side, cash resources were built up during this period, and the financial position of the corporation became quite strong. But, it was a static rather than a dynamic strength. It was common to hear Wards facetiously referred to as "the bank with a store front."

That, then, was the position in which the Directors found themselves when Mr. Barr was elected Chairman and President in May, 1955. The Directors had decided that the time had come to reverse this policy of retrenchment -- to embark upon a new and positive program of rehabilitation and expansion.

REASSESSMENT OF BUSINESS PHILOSOPHY

As we reviewed our problems in the light of the facts which I have enumerated, our first step was to reassess our business philosophy. I was tempted to say "long range objectives" but at that point we really didn't have any. All we knew for sure was that the Directors had handed Mr. Barr the assignment of reversing the downward trend of sales and to increase earnings. We did know that despite our lack of growth over the past ten years, Wards was still an important factor in the retailing business with an established reputation in millions of homes throughout America as a reliable place to buy dependable merchandise at fair prices. We knew that the company was inherently sound with a great reservoir of dormant strength and vitality. From a thorough assessment of our strength and weaknesses, it was evident that Wards had at least four major needs:

1. A need to modernize many of its present stores and display facilities, and a need for new stores – particularly in suburban locations with adequate parking facilities.
2. A need for a complete overhaul of its distribution system.
3. A need for more aggressive merchandising programs and policies.
4. A need to revitalize its entire organization, its personnel programs, and the spirit and morale of its 60 thousand employees.

These needs in effect set the broad objectives of our program for growth and improvement.

We consulted specialists in such fields as sales promotion, product and package design, and store layout. We encouraged more imaginative and aggressive advertising, we furnished all stores with new display equipment, we established a monthly newspaper to keep our employees posted on all phases of the new program, we began the development of a modern employee benefit program and, of greatest importance, we undertook an active search for a new, aggressive management team.

FORM OF ORGANIZATION

With these "bread and butter" moves under way, our next requirement was to determine what form of organization was necessary to accomplish our basic objectives and to implement our program of growth. With the assistance of a leading management engineering firm, we began an intensive examination of our management structure from an organizational standpoint. This examination pointed to two major difficulties which, if not corrected, would hinder the accomplishment of our objectives and the successful development and execution of our program.

The first difficulty was the lack of proper coordination between the retail and mail order divisions of the company. Since 1926, when the first retail store was opened, the retail store business had been operated and managed independently of the mail order business. This led to a number of inefficiencies. For one thing, the two divisions devoted too much time to competing with each other. Second, the overall interests of the corporation were frequently neglected and even harmed as one division vied for advantage over the other. Their promotional plans were independently developed and neither made adequate use of the facilities and services of the other. Valuable management talent and time were dissipated and the cost disadvantages which were created were something we could not afford.

To correct the harmful effects and conflicts which flowed from this internal competition, we took two major steps. First, we eliminated the retail and mail order divisions as such at the Home Office. Second, we delegated responsibility for the operation of all stores and mail order houses in the field to four Regional General Managers. These four managers are now responsible for the growth of Wards sales and profits in their respective areas, regardless of whether the sale originates from a catalog or is an over-the-counter transaction in a retail store.

EXCESSIVE CENTRALIZATION OF AUTHORITY

The second major difficulty which faced the Company in 1955 arose from the excessively high degree of centralization of authority which had existed at Wards for many years. This centralization of authority resulted in an unhealthy rigidity of Home Office management and the inevitable consequence of a weakened field man-

agement. Variations in customer preference from city to city, differences of climate and competitive conditions, and the importance of improving our merchandise turn-over, all supported the wisdom of delegating more authority to our Store, District, and Regional Managers.

I realize that I am talking to a sophisticated audience and it must be obvious that there is little need for a budget or budgetary system if one man makes all the decisions, and we did at that time.

In the reorganization we placed responsibility for profit nearer to the scene of operations, and authority has been delegated commensurate with this responsibility.

REORGANIZATION STEPS

This reorganization was accomplished in two steps. On July 16, 1957 we announced the reorganization of our Home Office structure. September 16, 1957, was moving day for the field organization at Wards. On that date about 120 of our key people in the field were reassigned and everyone was in place except the Controller's department. Chiefly because of fiscal year problems, the decentralization of the Controller's division did not start until February 1, 1958. By June 1, 1958 our complete organization on a decentralized basis was in place and functioning. Many of the planned improvements in the functioning of our decentralized Controller's organization were not yet effective because, as you Budget Officers well know, better systems and mechanization don't happen merely by edict, or over-night.

At the same time we were planning our reorganization, we were struggling with the problems of financial planning and control. We realized, as I am sure all of you do, that decentralization of authority without control is chaos.

FINANCIAL ORGANIZATION STRUCTURE

Just a word about our financial organization structure. At headquarters in Chicago the Controller and Treasurer report to the Financial Vice President. The Controller is supported by five key men. Three are designated as Assistant Controllers in charge of Budgets and Analyses, General Accounting, and Taxes and Insurance respectively. In addition, the Methods Research Manager and the Internal Audit Manager comprise the balance of the Controller's key staff.

This organizational structure is duplicated in each of the four regional offices except for the Internal Audit function which remains centralized. Each Regional Controller is supported by a Budget Manager, an Accounting Manager, and a Methods and Research Manager. Under our concept the Regional Controller reports on a direct line basis to the Regional General Manager but with strong functional leadership from the Controller of the company and in turn the key personnel at the Regional Controller level have a strong functional relationship to their counterparts at headquarters.

Under the highly centralized organization I referred to earlier, we had a Budget Manager but he had very little to manage. I do not mean to leave the impression that this was peculiar at Wards. I suspect it applied, and perhaps still does, in many retail companies. Under the highly centralized form of management, Wards concept of a budget was a six months operating plan called the budget for the spring and fall season. This was laboriously prepared, only to be completely ignored as soon as it was finished and then never referred to again. There was no such thing as a capital budget. I mention these points only to indicate the degree of training involved inasmuch as throughout our entire organization six months was the longest period any of our people had ever been trained to think and plan -- and in many departments we had not even had that.

ENLISTMENT OF OUTSIDE CONSULTANTS

We quickly recognized that we needed outside help. In December, 1957, with the help of outside consultants, we began a concerted study of our planning and control procedures. This study has produced a planning and control program which is designed to:

1. Spell out the company's plans for sales growth, increased inventory turnover, improved margins, and higher net profits.
2. Enable the Board of Directors and the top management to evaluate the effect of proposed changes in plans upon the company's projected net profits and return on investment.
3. Provide for the measurement of actual performance against planned performance and identify, where possible, the individuals responsible for profit results as well as the corrective action they have taken or intend to take when performance falls below plan.
4. Insure that planning and measuring processes provide effective control over Wards decentralized organization.

Our financial organization, headed by myself, was given the basic responsibility for providing the overall guidance and leadership to this program and for integrating the various projects.

The criteria we developed for our system of planning and control are:

1. All plans are to be built within a framework of long range objectives.
2. All planning and control data are to be integrated into a single, comprehensive picture of the business.
3. Essential information, both financial and non-financial, is to be provided key executives for planning, decision-making and control.

4. The profit and investment impact of alternative action programs must be evaluated.

The development of these criteria then led us to five separate but interrelated planning and measuring processes which we needed to build into Wards basic management procedures:

1. Development of long range objectives which, in turn, serve as a frame of reference for the development of short range objectives which will guide the building of annual and seasonal plans.
2. Preparation of a comprehensive integrated merchandising plan each season. (Spring and Fall)
3. Construction each season of an operating plan that will serve as the basis for planning and measuring all elements of store expense.
4. Preparation of an annual facilities plan covering new and relocated stores, warehouses, and other changes in physical facilities.
5. Summarization of all financial elements of the above planning processes to evaluate their financial effect, and to determine the funds required for their execution.

EFFECTIVE COMMUNICATIONS

We knew, from the beginning, that to be successful it was important that all levels of management understand and accept this new concept. To that end we held meetings in each region as well as in the Home Office to discuss every facet of these initial seeps, and many suggestions received in these meetings are reflected in the planning processes we have adopted.

In order to break this huge project into digestible pieces, we next proceeded to organize six separate but interrelated projects. We assigned specific responsibility for each project, and we established detailed time schedules for each individual project. These six projects are:

1. Company Objectives
   A project to develop and express general and specific objectives for the Corporation, each functional group, and each region.
2. Merchandising Plan
   A project to develop a completely integrated merchandising planning process with full store and regional participation.
3. Inventory Plan
   A project to develop improved inventory planning and control to support a competitive merchandising plan.
4. Operating Plan
   A project to develop yardsticks for planning and controlling all elements of store expense, and to integrate operating expense planning with the other planning processes.
5. Facilities Plan
   A project to develop criteria and provide for appraisal and review of integrated long- and short-term plans for new or relocated stores, warehouses, or other major facilities, store closings and maintenance and improvement projects.
6. Financial Plan
   A project to develop a comprehensive financial planning process which reflects and summarizes the financial elements of the merchandising, inventory, operating, and facilities plans.

REVIEW OF STATUS

I wish I could tell you that every phase of this huge program was completely in operation and functioning perfectly. If I were writing this article three years from now, I probably would have to admit that it wasn't functioning perfectly even then. I will tell you exactly where we stand currently so that you can judge for yourself our accomplishments.

Our **first** project was the establishment of company objectives. We have sweated out our objectives for the next five years as to sales, profits, and return on investment and these objectives have been communicated to the stockholders and to all the key people in our organization within the past 30 days. At the stockholders' meeting on April 24, 1959 Mr. Barr said this:

"Because of the importance of long range planning, I feel that the stockholders should be more fully informed concerning our plans for Montgomery Ward, as they have been developed by your Board of Directors and your management.

"During the current year, 1959, we plan to open 10 retail department stores, 45 catalog stores, 2 distribution centers, and 4 hard line stores. During 1960, we plan to open 20 retail department stores, about 40 catalog stores, 2 additional distribution centers and a substantial number of hard line stores.

"The necessary steps have been taken to assure that the stage is set for the company's continued growth and development. Our organization structure has been well defined, our key personnel are in place and hard at work, and the necessary authority and responsibility has been delegated. Our plans for continued growth are designed to produce an estimated sales increase from new store facilities of approximately $150 million each year. New stores and distribution centers are being developed at a rate which will achieve this planned increase in sales volume.

"By the end of 1959, we will have put all of our excess cash, previously invested in low earning securities, to work in higher earning merchandising assets. We have ample resources to carry out our program of planned growth, which over the next five years calls for an additional

investment of approximately $500 million in inventories, accounts receivable and fixed assets."

I believe this statement not only states long range objectives, but specific objectives for 1960. Following the stockholders' meeting, Mr. Barr, Mr. Hammaker (our new president), and myself made a swing to our regional offices to outline the entire program in considerably more depth to all our key personnel.

Our **second** project was the development of a completely integrated merchandising planning process. Specific merchandise departments were picked in 1958 and pilot tests run and detailed procedures developed. Our merchandising planning for the fall season 1959 is currently underway, using the techniques and procedures that have been developed in our larger stores. Our time schedule calls for complete installation with the spring 1960 season.

Our **third** project was the development of an improved inventory planning and control system to support a competitive merchandising plan. Frankly, this is one of the toughest areas I have been up against in my business experience. We have identified and reached agreement on the weaknesses in our present system. We conducted specific research in six pilot stores in 1958 to test various systems and techniques to overcome the weaknesses. We have carefully surveyed our competitors' practices in this area and I personally am convinced that none of them have the complete and perfect answer yet. I assure you we don't but I also assure you that we will come up with a system that will represent a fantastic improvement as compared to the present. We are employing operations research techniques in our pilot tests which we are sure will be productive.

Our **fourth** project was the development of an operating plan integrated with the merchandising and inventory plan. Another way of saying it is that we are developing a variable budget for our retail stores. In our mail order operations we have always had a variable budget and done an outstanding job of controlling expense. For retail stores this is something quite new -- at least as far as Wards is concerned. We started tests in three stores in 1958. For the spring season of 1959 we added nine more stores and our time schedule calls for complete installation February 1, 1960. We have developed an operating manual which will continue to be refined as the tests continue throughout 1959. Our major problem now is the training of sufficient people for installation this fall so that we are operating on this basis beginning February 1.

Our **fifth** project was the development of a facilities plan. I consider this project completed except for such refinements as will arise as we gain more experience. I could tell you exactly how many stores we plan to open in 1960 and where. I could tell you their size, their expected sales volume, net profit, and anticipated return on investment. The criteria for measurement have been fully developed. The same holds true for our long and short term plans for new distribution centers, other major facilities, store closings, and maintenance and improvement projects.

Our **sixth** project was the development of a financial plan to reflect and summarize the financial elements of the merchandising, inventory, operating, and facilities plans. I consider this project completed in the sense that we have completed and installed a system of reporting on a responsibility accounting basis for each organizational unit of our company. The entire emphasis is placed on actual results against planned results.

ROLE OF BUDGET DEPARTMENT

I have been a long time in getting to the role of our Budget Department. From your own experience, I am sure you can readily visualize the task which confronted our Budget Department in implementing the principles and philosophy of the program I have just described. The planning problem was quite similar, in many respects, to the general company problems. It was highly centralized, with facilities which were inadequate in many important respects, and which at the same time involved a great deal of work of a detailed, statistical nature.

The centralized philosophy which used to be typical of Wards management was reflected in the budget system. The planning and budgeting that was done was primarily from the top down. Sales and earnings budgets were assigned to down-the-line management from the top. They represented prescribed objectives established by fiat. They did not contain the benefit of the constructive contribution of the hundreds of managers in the company on whom Wards must rely for successful and aggressive management.

As I have indicated, the budgeting procedures previously followed were inadequate. There were many shortcomings, many of which can be attributed to the management philosophy which used to prevail. We had no corporate objectives to provide a frame of reference for evaluation of seasonal and annual plans. There was no effective process for planning and budgeting Capital Expenditures. The critical lack of an effective Capital Budget can best be understood in terms of our plan to spend over $40 million on Properties and Equipment during the current year.

Other deficiencies included the lack of a variable budget system to measure the operating expense in our hundreds of retail stores. The lack of such a system created two major problems. One of these was the untold hours of management time devoted to puzzling over evaluations of the adequacy of actual performance. The second and more critical, was the tendency to make arbitrary decisions concerning proper levels of expense which were necessarily based

on "horseback" opinions rather than careful analysis and study.

We also had a problem with respect to communications to the Field personnel. In a far-flung organization such as Wards, there are many innovations and programs, originating at the Home Office level, which have to be communicated to the Field before competent planning can be done at that level. A good deal of information of this nature was being transmitted from the Home Office, but it was not coordinated with an overall planning process.

Strangely enough, some of the effort being expended in Wards to budget involved more work than was necessary in a sound system. An example of this was the procedure for budgeting administrative expense. This budget was customarily prepared twice a year, on a Spring and Fall Season basis, and was subject to running revisions entailing a considerable amount of clerical work and record keeping. There used to be literally hundreds of revisions made in the Administrative Expense Budget.

FORMIDABLE TASK

With the foregoing as background, you can understand that we had a formidable task in providing Wards with the kind of planning and control processes suited to the new form of organization and the new aggressive expansion program. The role of the Budget Department has included responsibilities for advising and participating in the setting of company objectives, and in the communication of these objectives in a manner to guide Field planning. It has naturally also had the central responsibility for scheduling the entire planning process and for coordinating this effort and integrating the entire program for presentation to management.

We rely on the Budget Department to make a meaningful review of the adequacy of our plans to be sure that they are in accord with our management philosophy. By this, I refer to our philosophy that our plans should always represent reaching objectives which are attainable with hard effort.

I have discussed at length concerning the planning process, but I do not want to mislead you concerning the intense interest of management in actual achievement. After all, the Board of Directors' primary charge to Mr. Barr in 1955 was to increase earnings. Accordingly, we attach great importance to the evaluation of results compared to plan, and expect competent analysis from our Budget Department to assist management in such evaluations.

In carrying out these responsibilities, the Budget Department has taken many steps to assist in making decentralization a way of life at Wards. It takes a period of time for the transition. In fact, to move from a highly centralized form of management to an effective and dependable decentralization of authority and responsibility, involves, as you know, the creation of a new kind of thinking on the part of our hundreds of managers, and the thinking of hundreds of people cannot be changed over night. In modifying our budgeting and planning processes, we have therefore tried to devise a gradually increasing delegation of the responsibility for preparing plans.

NECESSARY HOME OFFICE CONTROLS

While I have described Wards as having adopted a decentralized form of organization, and this is true, we are still a chain operation. A chain operation can justify its existence on an economic basis only through the centralization of many activities which are of fundamental importance in carrying on the business. In the Home Office level of the organization, we must retain a central merchandising, buying and promotion function. This group makes the many decisions concerning the selection and pricing of our thousands of items of merchandise. It also handles the greatest part of the details underlying our advertising and promotion activities.

As you know from your own experience, a planning process inevitably throws a bright spotlight on the need for a specific definition of responsibility. On the one hand, we have our merchandising group at the Home Office making hundreds of decisions which affect the ability of our Field personnel to make sales and earn a profit. On the other hand, we are holding our Field personnel responsible for making these sales and earning these profits. Our budget problem in this area has involved translating our management principles and philosophy into practice. It has been a knotty problem.

Our solution has been to develop adequate communication between the Home Office Merchandising Group and the Field Managers. In the setting of our actual plans, we view the Home Office Merchandising Group as having responsibility for providing extensive and detailed recommendations and guidance to the Field. The Company Sales and Earnings Plan, however, is developed in the Field by the managers having the primary responsibility for actual sales and earnings performance.

PLANNING CAPITAL EXPENDITURES

We have had a somewhat similar problem in developing our process for planning capital expenditures. Our new store program is a relatively new activity for Wards. Before we could undertake an expansion program of this nature, we had first to create a staff of experts in the Home Office, because Wards had not previously been concerned with the problems inherent in planning and negotiating for new store locations and structures. This staff function is centralized in the Home Office. Our planning program, therefore, had to provide for this kind of capital planning to be

done primarily by the Home Office. The Field responsibility in capital planning is represented by the need to maintain and improve our existing facilities. The planning for expenditures of this nature has been designed to reflect the thinking and recommendations of our store managers, who did not previously participate in such planning.

Our capital budget is on an annual basis. It is one of the most important planning steps we undertake. Our expansion program requires a substantial capital investment and, since we are now putting money to work in the business, we no longer have an unlimited supply of funds. In fact, we expect to create an Acceptance Corporation in the next 60 days as the first step in our financing plans.

VARIABLE BUDGET SYSTEM

I think you will be interested in a few comments on the variable budget system which we have developed for our retail store operations. The largest element of expense is the payroll for sales people. Our problem is quite different from variable budgets in a manufacturing concern. In manufacturing, it is possible to set up the production line, determine the material requirements, machine speeds, and manpower requirements. These factors are reasonably consistent and repetitive from a standards viewpoint, which permits a fairly precise determination of allowable expense.

In retail trade, unfortunately, we cannot line up our customers and pass them through the store at a scheduled rate. We have to provide good service, but we cannot afford to overlook control of our selling payroll expense. We have been able to devise allowances for such expense based on careful analysis of each store's individual characteristics. The past experience of each store is taken into account and then adjusted on a judgmental basis to provide fixed and variable allowances. Our planning in this area goes beyond a system for keeping score. The new procedure is also designed to assist store managers in planning in advance for their payroll requirements through an organized and systematic analysis of their needs. In addition, we are encouraging constructive thinking toward improving present management practices in operating our several hundred retail stores. We anticipate a great improvement from these features of our new planning in this area.

A major change has also been accomplished in our planning of administrative expense budgets. Instead of the previous twice-a-year budgeting, which was subject to running revisions, we now plan for a full year, and do this on a fixed budget which is not subject to revision. Here, again, our planning process by no means stops with a manager's development of the amount of expense desired to carry out his function. Each manager in Wards presents with his proposed budget, a narrative description of the plans and thinking underlying his program for the coming year. This requires that he set down on paper his objectives. This step is of immense value in encouraging constructive planning for improvement and represents a valuable communication to higher management.

MANAGEMENT REPORTS

All of the processes I have described represent many facets of our overall planning program. When we integrate the financial results of this planning in depth, we are in a position to present management with a well supported comprehensive plan of action. Having obtained management approval for such a plan, we then measure actual performance closely. The reporting of actual results and the evaluation of performance is an entire field in itself. I shall only tell you here that we have developed a system of reporting which is in accord with responsibility in the organization, and which emphasizes comparison against plan and de-emphasizes how we are doing compared to last year.

IMPORTANCE OF BUDGET MANAGER

I hope I have conveyed to you the importance of the contribution the Budget Manager and his department make to the total planning and reporting process.

I used an analogy several years ago in an American Management Association speech which still expresses my belief in the role of the Budget Department.

"Think back for a moment to your reading as a boy. Do you remember the Medicine Man of the Indian tribe? The most promising youths were selected to undergo long, rigorous and intensive training for that job. All the records, traditions, the hard-learned wisdom of generations were in his keeping. He advised when the corn was to be planted and how much - when to migrate and where - when to make war and conclude peace. He read the omens, propitiated the evil spirits and invoked the good ones. A Tribal Chief was chosen for various reasons - heredity, powerful alliances, bravery in battle, or because he was the natural and acknowledged leader. But behind him as counsel stood the Medicine Man - continuing symbol of the past and interpreter of its bearing on the future. His name never went down in history, but his influence may have changed it. A competent budget organization should be the Medicine Man of business. It should function as a combination of historian, consultant, and prophet."

This, then, is our philosophy and the reason for adopting the planning and reporting process I have described, all to the end that Mr. Barr described in his concluding paragraph in his statement to the stockholders on April 24, 1959.

"Our primary and ultimate objective in all of these plans is to improve the profitability of Wards operations. Implementation of these plans and accomplishment of this objective will benefit our stockholders, our suppliers, our employees, and our customers. We will be able to serve more customers better, we will be able to offer more opportunity and greater reward to our employees, we will increase our purchases from suppliers, and we will increase the profitability of our stockholders' investment."

LAWRENCE T. ALLISON, Controller & Office Mgr., The Howell Co., Div. Acme Steel Co., St. Charles, Illinois.

ROBERT W. MARSHALL, Industrial Engineer, Texas Instruments Inc., Dallas, Texas

W.E. TULLY, Controller, Dr. Pepper Co., Dallas, Texas

ROBERT C. DRUMMOND, Asst. Mgr., Consolidation Acctg. Dept., Magnolia Petroleum Co., Dallas, Texas

ARTHUR O. BRYMER, Budget Administrator (Gen'l Office), Convair, Div. Gen'l Dynamics Corp., San Diego, California

HOWARD E. LEE, Chief of Budgets, Convair-Astronautics, San Diego, California

THOMAS E. DRENTEN, Touche, Niven, Bailey & Smart, Detroit, Michigan

HOWARD M. DANIELS, Professor of Accounting, University of Houston, Houston, Texas

K. E. GUEBERT, Secretary and Controller, F.M. Stamper Co., Normandy, Missouri

GEORGE A. HERN, Asst. Treasurer, Cupples Co. Manufacturers, Clayton, Missouri

ARNOLD J. COHEN, Comptroller-Treasurer, B G S Shoe Corp., Manchester, New Hampshire

F.D. LOY, Chief Accountant & Budget Administrator, Fulton-Sylphon Div., Robertshaw-Fulton Controls Company, Knoxville, Tennessee

DENVER B. DEFFENDALL, Budget Director, Pitman-Moore Co., Indianapolis, Ind.

C. ARNOLD CARLSON, Partner-CPA's, Peat, Marwick, Mitchell & Co., Detroit, Michigan

HERBERT LANDSMAN, Operating Vice-Pres - Research, Federated Dept. Stores, Inc, Cinti., Ohio

RALPH H. HACKER, Mgr. Cost Acctg & Statistics, St. Louis San Francisco Railway Co., Webster Groves, Missouri

JOHN HARDIN, Plant Controller, Trailmobile Inc., Berkeley, California

BERNARD P. BUSSELL, Controller, Belmont Smelting & Refining Works, Inc., Garden City, L.I., N.Y.

KENNETH F. SCHUBA, Staff Accountant-CPA's, Touche, Niven, Bailey & Smart, Minneapolis, Minn.

GORDON A. RICHARDSON, Asst. Comptroller, Great Northern Railway Co., St. Paul, Minnesota

DONALD W. BOUCHER, Gladstone, Michigan

FREDERICK C. SANDER – Chief Budget and Program Analysis Branch U.S. Atomic Energy Commission Los Alamos, New Mexico

ROBERT P. BENJAMIN – Statements, Cost and Payables Mgr., Caterpillar Tractor Co., San Leandro, Cal.

GEORGE J. WERLE – Asst Budget Director, Combustion Engineering, Inc., New York, New York

CHARLES W. NICHOLAS – Budget Supervisor-Admin Dept. Budgets, Combustion Eng. Inc. New York, N.Y.

ANTHONY N. BIASI – Budget Mgr., Kearfott Co., Little Falls, New Jersey

LOUIS N. PEARCE – Plant Controller, Armstrong Cork Co., Bradley, Illinois

LOUIS W. GRAFFAGNA – Chief Cost Accountant, The Howell Co.-Div. Acme Steel Co., St Charles, Ill.

CLARENCE R. WALDOCK – Budget Mgr., Stewart-Warner Electronics, Chicago, Illinois

WILLIAM H. HUNT Jr., – Director Labor Analysis Super., Lockheed Aircraft Corp., Atlanta, Ga.

WILLIAM R. BASS – Budget Supervisor, Lockheed Aircraft Corp., Chamblee, Ga.

PAUL T. CARROLL – Mgr. Credit Dept. & Mgr. of Mfg. Acctg., American Art Metals Co., Norcross, Ga.

DONALD A. PABST – Cost Analyst, Bliss & Laughlin, Inc., Harvey, Illinois

JOSEPH POST – Asst. to the comptroller, Standard Railway Equipment Mfg. Co., Chicago, Ill.

T. P. CONFORTI – Admin. Budget Mgrs., Montgomery Ward, Chicago, Illinois

WILLIAM A. TURNER – Controller, Julian & Kokenge Co., Columbus, Ohio

CHARLES P. VOLLER – Controller, Budget & Financial Planning, Clark Bros.,Co. Div. Dresser Industries, Inc., Allegany, New York

DANFORTH A. HALL – Supervisor Budgets & Reports, Gillette Safety Razor Co., Boston, Mass.

ALVIN W. SCHEUERMAN – Asst. Controller & Budget Mgr., Sealright-Oswego Falls Corp, Fulton, N.Y.

HARRISON G. CARR – Asst Budget Director, Economics Laboratory, Inc., St. Paul, Minnesota

GEORGE N. HOFFMAN – Cost & Budget Supervisor, A. Y. McDonald Mfg. Co., Dubuque, Iowa

JOHN BAYLIS – Supervisor of Profit Planning, Pacific Finance Corp., Los Angeles, Calif.

CARL M. KRUMMEL – Supervisor of Statistics & Taxes, Cinti & Suburban Bell Telephone Co. Cinti, O.

MATHEW G. BOLIN – Supervisor-Facility Analysis Section-Central Staff, Chrysler Corp., Detroit, Mich.

ROBERT J. DUCH – Planning Mgr., Allstate Insurance Co., West Hartford, Conn.

EARLE L. SMITH – Asst. Secy & Treas., The Miller Co., Meriden, Conn.

SALVADOR P. MUTE – Budget Supervisor, The U.S. Time Corp., Forestville, Conn.

PAUL A. YOUNG – Budget Supervisor, Nekoosa-Edwards Paper Co., Port Edwards, Wisconsin

JOHN P. HIZER – Asst. to Controller, Acme Steel Co., Chicago, Illinois

RALPH H. SCHULZ,– Secy-Treas, Freeman Chemical Corp., Port Washington, Wisconsin

JOHN H. WALK – Facilities Analyst, Convair-Div. General Dynamics, San Diego, California

FRANK S. MASCARI – Cost Control Coordinator, Convair-Div. General Dynamics, San Diego, Calif.

STEPHEN V. EHRLICH – Asst. Budget Director, Rayco Seat Cover Sales Corp, Paterson, New Jersey

JOHN J. AHERN – Financial Analyst, Merck & Co., Inc., Rahway, New Jersey

JOHN E. REID – Specialist-Budgets & Measurements, General Electric Co., Appliance Park, Louisville, Ky.

EDWARD L. MERSETH – Enamel Plant Controller, American Radiator & Standard Sanitary Corp., Louv, Ky.

JACK R. ROTHWELL – Supervisor of Costs & Budgets, Theo Hamm Brewing Co., Los Angeles, Calif.

E.C. WHITFIELD – Supervisor of Cost and Estimating Dept. GMC Truck & Coach Div.–General Motors Corp. Pontiac, Michigan

C.L. LOTTRIDGE, Jr., – Supervisor of Budgets and Property Records. GMC Truck and Coach Div. General Motors Corp., Pontiac, Michigan

FRED C. ENGLAND – Controller, Jam Handy Organization, Inc., Detroit, Michigan

W. M. HENSHAW – Budget Coordinator, Jones & Laughlin Steel Corp, Detroit, Michigan

CHARLES ERROL EXLEY JR., – Mgr. Financial-Central Staff, Burroughs Corp., Detroit, Michigan

KENNETH R. DENNIS – Audit Mgr., Arthur Andersen & Co., Cincinnati, Ohio

F. G. WELLMAN – Asst. Controller, Illinois Agricultural Assn., Chicago, Illinois

HORACE S. HITCHCOCK – Cost Accountant, Montag Bros, Inc. Atlanta, Georgia

A.M. WOLFF – Controller, Wembley Inc., New Orleans, Louisiana

CHARLES L. ALLEN – Mgr-Financial Analysis American Radiator & Standard Sanitary Corp. New York New York

CYRIL L. PRUDHOMME – Budget Director, Milprint, Inc., Milwaukee, Wisconsin

HAWLEY M. BOYCE – Budget Analyst, Red Star Yeast & Products Co., Milwaukee, Wisconsin

CARL C. TONGRING – Mgr. Cost Dept., Spencer Kellogg & Sons, Inc., Buffalo, New York

EDWARD P. GARNIER – Accounting Mgr., General Foods Corp, Kankakee, Illinois

1959 CONFERENCE SCENES MINNEAPOLIS

Aichholz Moor Bacon Millar Mason Plummer

Seminar Speakers

Working husbands
sightseeing wives

Cain Maurice Stans Neumann
U.S. Budget Director

Hal Mason, right, Past President congratulates President Elect R. Visch Millar on taking over reins of NSBB for 1959-60 Chapter Year.

Convention Planners Past and Future

A PRACTICAL APPROACH TO CAPITAL BUDGETING

Charles S. Holsteen
Director of Budgets,
United Air Lines, Inc.
Addressing the 9th Annual
NSBB National Conference

The evaluation of proposed capital expenditures is just one phase of the subject of capital budgeting, BUT ------ it is perhaps the most important phase. The benefits to be derived from making the right decision based on a scientific study of the various proposed projects are self-evident, but the determination of the facts leading up to the right decision are not self-evident at all. The right decision is apparent only after all the facts have been sifted, weighed, purified and analyzed in relation to a self-established barometer. United Air Lines uses a system based on the concept of "Average Annual Cost of a Capital Expenditure". Its application is explained in detail in this article. Check this technique against what you are now using, or, if no system is in use in your company, you could do your company a distinct service by adopting this technique for evaluating proposed capital expenditures.

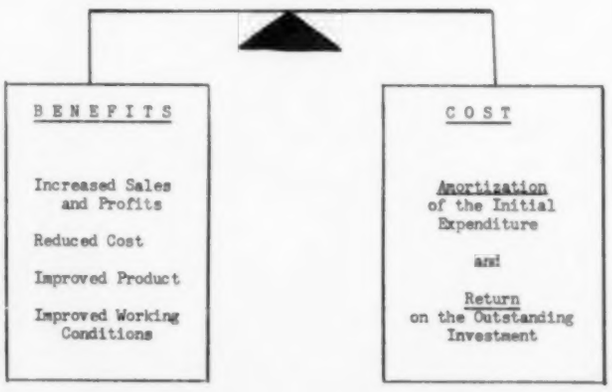
We at United Air Lines have developed an approach to the evaluation of capital expenditures which we refer to as the "Average Annual Cost" technique. We have been working on this idea for some time; and when I say "we" I am speaking advisedly. I certainly have not developed it alone. I have, for one thing, had the very able assistance of my staff, particularly Russell J. Smith, our Capital Budget Superintendent. Also, a very material contribution has been made by Herbert B. Hubbard of our Industrial Engineering Department, whom some of you may know as our Manager of Operations Research and Applied Science.

I should also like to point out that although we at United have developed this technique quite independently, we are inclined to believe that it is based on such orthodox and well-known principles of financial mathematics that it might well have been developed simultaneously by other companies. Although we know of none such, it would not surprise us at all to learn that it is being used by other companies, if not in a form identical to ours, perhaps in a form so similar that it is virtually the same thing.

As we see it, the evaluation of a proposed capital expenditure is essentially a matter of very simple logic. It is merely the process of weighing the benefits to be derived from the expenditure, against the cost of making the expenditure. (See Exhibit I).

Exhibit I

EVALUATION OF A PROPOSED CAPITAL EXPENDITURE



The benefits to be derived from a proposed capital expenditure may be any one or several of a rather wide variety. But in general they have to do with such things as:

Increased Sales and Profits to be drived from expansion or increased plant capacity.

Reduced Cost through the acquisition of new or more efficient equipment.

Improved Product or Service to the customer requiring new or different plant facilities.

Improved Working Conditions for employees, through improved facilities and equipment.

Some of these benefits, such as cost reduction, can be quite tangible and may be readily quantified in terms of dollars and cents. Others, such as improved working conditions, may be quite intangible and difficult to quantify. But tangible or intangible, management must, in considering the wisdom of a capital expenditure, formulate an opinion of some sort, precise or hazy though it may be, of the beneficial effects which the proposed expenditure will have on the income statement, in terms of increased revenues or reduced expenses, or both. Against these, then, it must weigh the cost of the capital expenditure.

COST IS MORE THAN CASH OUTLAY

Now, what is the cost of a capital expenditure? In simplest terms, of course, it is the expenditure itself: the cash outlay. In common parlance, the cost of a piece of capital equipment in the cash you pay for it. However, since the cash must be obtained from the capital markets, there is another element of cost involved, namely, "return on the investment".

Thus, as we see it, there are two primary elements in the cost of a capital expenditure first, the expenditure itself, or the investment made by the company's treasury, in the capital facilities acquired, and, secondly, the investment return, or earnings to which the company's treasury is entitled for the use of its funds.

Both of these elements of cost of a capital expenditure are reflected on an annual basis in the company's Income Statement. The initial expenditure is shown as depreciation, which is nothing more nor less than the annual amortization of the initial expenditure during the useful life of the capital equipment for which the expenditure was made. And the "return on investment" is reflected in the net earnings after taxes which accrue to the company's treasury for the use of its funds.

Thus in terms of the annual Profit & Loss Statement the cost of a capital expenditure consists of two primary elements:

1. Amoritzation of the initial expenditure during its useful life, and
2. Return on the outstanding investment.

DIRECT REDUCTION LOAN?

A very good example of the application of this concept of the cost of a capital expenditure is the currently popular direct reduction loan, or as many of us home-owners know it, the equal-monthly-payment home loan mortgage.

Exhibit II

MONTHLY REDUCTION LOAN

Initial Loan	$10,000
Interest Rate	5%
Term	20 Years
Monthly Payment	$66.00

	First Month	Second Month	-----	Last Month
Principal	$10,000.00	$9,975.67	-----	$65.73
Payment	66.00	66.00	-----	66.00
Interest	41.67	41.57	-----	.27
Amortization	24.33	24.43	-----	65.73

When a mortgage banker makes a loan of, say, $10,000 at 5% for 20 years, he charges the borrower a flat rate of $66.00 per month. This $66.00 is computed mathematically as the amount to be paid each month over a period of 20 years in order to reimburse the banker for his initial outlay of $10,000 and provide him with a return of 5% on the funds outstanding. As you probably know, it works something like this: During the first month, as shown in Exhibit II, the funds outstanding amount to $10,000. At the end of the month, the banker receives a payment of $66.00. From this he deducts one month's interest on $10,000 at 5% or $41.67. This leaves $24.33 which is applied as amortization of the loan.

Thus at the beginning of the second month the funds outstanding have been reduced to $9,975.67.

Again, at the end of this month the banker receives another regular payment of $66.00. This time he deducts one month's interest at 5% on $9,975.67 or $41.57, and there remains $24.43 to be applied as further amortization of the outstanding loan.

This process continues, month by month for 20 years, until at the beginning of the 240th month the outstanding loan has been reduced to $65.73, and the final monthly payment of $66.00 is sufficient to cover both the final month's interest of 27 cents and the outstanding balance of the original loan.

Thus in the case of a mortgage banker who wants to earn 5% on his outstanding funds, the average monthly cost of a capital expenditure for a $10,000, 20-year mortgage loan is $66.00.

For convenience in determining the monthly cost of loans for various amounts, extending over various terms, the mortgage banker uses a table which tells him at a glance what the monthly cost of a given loan will be.

Exhibit III

MONTHLY PAYMENT REQUIRED TO AMORTIZE A 5% LOAN OF $1.00

TERM (YEARS)	MONTHLY PAYMENT
2	$.043872
3	.029971
4	.023030
5	.018872
6	.016105
7	.014134
8	.012660
9	.011518
10	.010607
11	.009865
12	.009249
13	.008731
14	.008289
15	.007908
16	.007577
17	.007287
18	.007031
19	.006803
20	.006600
21	.006418
22	.006253
23	.006105
24	.005969
25	.005846

Exhibit III, for example, shows an abbreviated table that gives the "Monthly Payment Required to Amortize a 5% Loan of $1.00" over any number of years from 2 to 25. It shows, that in the case of a twenty-year loan the monthly cost would be "point zero, zero, 66 dollars", or 6.6¢ per dollar of the initial loan. For a $10,000 loan such as we discussed the monthly cost would be ten thousand times "point zero, zero, 66" or $66.00.

Such a table is invaluable to the mortgage banker who makes a capital expenditure to acquire a mortgage loan. And in the case of the budgeteer who is interested in determining the cost of a capital expenditure for plant or equipment, a similar table can be computed, as shown in Exhibit IV.

(See next page)

EXHIBIT IV

AVERAGE ANNUAL COST OF CAPITAL EXPENDITURE OF $1.00

To Yield 10% After 52% Tax When 40% of Capital is Debt @ 4% Interest

Years of Service Life	Salvage Value in % of Initial Expenditure																			
	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95% *
1	1.1008	1.0549	1.0091	.9632	.9173	.8715	.8256	.7797	.7338	.6880	.6421	.5962	.5504	.5045	.4586	.4128	.3669	.3210	.2751	.2293
2	.5982	.5775	.5567	.5360	.5152	.4945	.4738	.4530	.4323	.4115	.3908	.3701	.3493	.3286	.3078	.2871	.2664	.2456	.2249	.2041
3	.4317	.4193	.4069	.3945	.3820	.3696	.3572	.3448	.3324	.3200	.3076	.2951	.2827	.2703	.2579	.2455	.2331	.2206	.2082	.1958
4	.3490	.3407	.3324	.3242	.3159	.3076	.2993	.2910	.2828	.2745	.2662	.2579	.2496	.2414	.2331	.2248	.2165	.2082	.2000	.1917
5	.2999	.2941	.2883	.2824	.2766	.2708	.2650	.2591	.2533	.2475	.2417	.2358	.2300	.2242	.2184	.2125	.2067	.2009	.1951	.1892
6	.2677	.2635	.2593	.2551	.2508	.2466	.2424	.2382	.2340	.2298	.2256	.2213	.2171	.2129	.2087	.2045	.2003	.1960	.1918	.1876
7	.2450	.2419	.2388	.2358	.2327	.2296	.2265	.2234	.2204	.2173	.2142	.2111	.2080	.2050	.2019	.1988	.1957	.1926	.1896	.1865
8	.2283	.2261	.2238	.2216	.2193	.2171	.2148	.2126	.2103	.2081	.2059	.2036	.2014	.1991	.1969	.1946	.1924	.1901	.1879	.1856
9	.2156	.2140	.2124	.2108	.2092	.2076	.2059	.2043	.2027	.2011	.1995	.1979	.1963	.1947	.1931	.1915	.1898	.1882	.1866	.1850
10	.2057	.2046	.2035	.2024	.2012	.2001	.1990	.1979	.1968	.1957	.1946	.1934	.1923	.1912	.1901	.1890	.1879	.1867	.1856	.1845
11	.1979	.1972	.1965	.1957	.1950	.1943	.1936	.1928	.1921	.1914	.1907	.1899	.1892	.1885	.1878	.1870	.1863	.1856	.1849	.1841
12	.1915	.1911	.1907	.1903	.1899	.1895	.1891	.1887	.1883	.1879	.1875	.1870	.1866	.1862	.1858	.1854	.1850	.1846	.1842	.1838
13	.1863	.1862	.1860	.1859	.1857	.1856	.1854	.1853	.1851	.1850	.1849	.1847	.1846	.1844	.1843	.1841	.1840	.1838	.1837	.1835
14	.1820	.1821	.1821	.1822	.1823	.1824	.1824	.1825	.1826	.1826	.1827	.1828	.1828	.1829	.1830	.1831	.1831	.1832	.1833	.1833
15	.1785	.1787	.1790	.1792	.1795	.1797	.1800	.1802	.1805	.1807	.1810	.1812	.1814	.1817	.1819	.1822	.1824	.1827	.1829	.1832
16	.1755	.1759	.1763	.1767	.1771	.1775	.1779	.1783	.1787	.1791	.1795	.1798	.1802	.1806	.1810	.1814	.1818	.1822	.1826	.1830
17	.1730	.1735	.1740	.1746	.1751	.1756	.1761	.1766	.1772	.1777	.1782	.1787	.1792	.1798	.1803	.1808	.1813	.1818	.1824	.1829
18	.1709	.1715	.1722	.1728	.1734	.1740	.1747	.1753	.1759	.1765	.1772	.1778	.1784	.1790	.1797	.1803	.1809	.1815	.1822	.1828
19	.1691	.1698	.1705	.1712	.1720	.1727	.1734	.1741	.1748	.1755	.1763	.1770	.1777	.1784	.1791	.1798	.1805	.1813	.1820	.1827
20	.1676	.1684	.1692	.1700	.1708	.1716	.1723	.1731	.1739	.1747	.1755	.1763	.1771	.1779	.1787	.1795	.1802	.1810	.1818	.1826
21	.1664	.1673	.1681	.1690	.1698	.1707	.1715	.1724	.1732	.1741	.1749	.1758	.1766	.1775	.1783	.1792	.1800	.1809	.1817	.1826
22	.1653	.1662	.1671	.1680	.1689	.1698	.1707	.1716	.1725	.1734	.1744	.1753	.1762	.1771	.1780	.1789	.1798	.1807	.1816	.1825
23	.1645	.1654	.1664	.1673	.1683	.1692	.1702	.1711	.1721	.1730	.1740	.1749	.1758	.1768	.1777	.1787	.1796	.1806	.1815	.1825
24	.1637	.1647	.1657	.1667	.1676	.1686	.1696	.1706	.1716	.1726	.1736	.1745	.1755	.1765	.1775	.1785	.1795	.1804	.1814	.1824
25	.1631	.1641	.1651	.1661	.1672	.1682	.1692	.1702	.1712	.1722	.1733	.1743	.1753	.1763	.1773	.1783	.1793	.1804	.1814	.1824

* At 100% salvage value the Average Annual Cost is .1834 regardless of service life

You will probably observe at once that this table is more elaborate than the mortgage loan table in Exhibit III. First of all, it has many more columns. These are necessary because, unlike a mortgage loan, a piece of capital equipment is normally amortized not to zero value but to a residual or salvage value which it is expected to have at the end of its useful life. Consequently, separate columns are provided in this table to enable the analyst to select the one that reflects the proper salvage value for the capital equipment being considered.

In addition to having more columns, however, this table is also considerably more complicated in its computation because it incorporates the income taxes which a corporation must pay before it can accrue earnings for the benefit of its equity investors. Thus, this table incorporates a third factor in the concept of the cost of a capital expenditure. In addition to amortization of the initial expenditure and return on the outstanding investment, it also covers the income taxes which must be paid to Uncle Sam on the earnings that are needed to provide that return.

Next let me call to your attention that this table is based on a rate of return of 10%. The choice of this rate for the construction of this table was purely arbitrary. It does not represent an average that is typical of any company or group of companies; nor --- and please I should like to underscore this: it does not represent what United Air Lines regards as proper. It is simply a nice round figure, and is used for illustrative purposes only. A company could construct a table on any other rate just as well. Or it could construct tables for several rates if it felt that different rates should be used for expenditures involving different degrees of risk.

Finally, let me point out that in the construction of this table we also assumed a capital structure consisting of 60% equity, and 40% debt at 4% interest. Some such assumption must be made in order to construct the table, because income taxes do not apply against that portion of the return which is paid out in the form of bond interest.

So much for a description of the table showing the Average Annual Cost of a Capital Expenditure of One Dollar. You might gain a better appreciation of the significance of the number shown in this table if we were to go through an illustrative example showing the cash flow under this concept, just as we did in the case of the mortgage loan. However, the introduction of income taxes and the construction of the table to show an annual cost rather than a monthly cost, which is based nevertheless on monthly cash flows, tend to make the illustration quite complicated and its presentation quite time-

consuming. In the limited space that we have, I should rather move along to some examples of how this concept of "Average Annual Cost" can be used in the evaluation of proposed capital expenditures.

So, suffice it to say at this point that the cash flow under the concept of "Average Annual Cost of a Capital Expenditure" is essentially similar to the cash flow involved in the equal monthly payment mortgage loan. Or, to give you a definition:

THE AVERAGE ANNUAL COST OF A CAPITAL EXPENDITURE

IS

THE EQUAL ANNUAL AMOUNT REQUIRED FOR

1. **AMORTIZATION** of the initial expenditure during the useful life of the equipment acquired.
2. **RETURN** on the funds invested,
3. **INCOME TAXES** associated with that return.

That, is what we mean when we refer to the "Average Annual Cost of a Capital Expenditure". Note that although it is designed to produce a desired net return after taxes, it is stated in terms of cost before taxes. Thus it is directly comparable, dollar-for-dollar with other items of revenue and expense shown on the operating statement.

AN IMPORTANT FEATURE

This is an important feature. In instances involving tangible benefits such as reduced operating expense, the benefits can be compared directly, with the average annual cost of the capital expenditure under consideration. And in instances involving intangible benefits, it is still of considerable advantage to be able to state the cost in terms of an annual operating expense, or an annual charge against revenues.

Let me give you some examples.

First, let's take a case involving only intangible benefits. Let's assume we are considering an expenditure to purchase new furniture for a clerical office, an office, we'll say, that houses about 40 people. And let's assume that the expenditure amounts to $10,000; and, since policies differ on this, let's assume that we are going to capitalize it.

Now, in evaluating this expenditure you would go through the process of weighing this $10,000 outlay against the benefits to be derived from it. And the benefits in this case are essentially intangible. They consist of "Improved Working Conditions" for your employees, and "Improved Office Appearance" as it affects both your employees and such outsiders who might have occasion to enter the office.

It might be that at this point you would make a judgment decision. You might decide without further analysis that the benefits to be derived, do, or do not, justify the expenditure of $10,000.00. But I doubt this. I suspect that you would be inclined to go at least one step further. You would probably go through the mental process of making some sort of off-the-cuff calculation to convert the $10,000 outlay into terms of cost per year. You would probably say to yourself that this furniture would last about ten years, and that therefore this expenditure was equivalent to an outlay of about $1,000 per year, or, since it affects 40 employees, $25 per employee per year. I think you would go at least this far before making a judgement decision.

Indeed you might be somewhat more sophisticated in your analysis and allow for the fact that this furniture would have some salvage value, or residual value, at the end of the ten years and that therefore the cost chargeable to this ten-year period is somewhat less than $25 per employee per year.

In fact you might set down your calculation on the back of an envelope something like this:

Estimated life	10 years
Salvage value	10% or $1,000
Net expenditure to be amortized	$9,000
Net cost per year	$900
Net cost per year per employee	$22.50

Or, if you were a financially minded individual, you would probably go a step further in your your analysis. You would probably say to yourself that to spend this $10,000 for new furniture would deprive your company of $10,000 which it might otherwise spend productively to earn a return for its owners. Assuming that on the average a 10% return is necessary to support the company's capital structure, and enable it to obtain needed funds in the financial markets, you could reason that this project should be charged with that 10%. Consequently you would probably continue your analysis something like this:

The average outstanding investment consisting of $10,000 at the beginning of the period, and $1,000 salvage value at the end of the period, would be $10,000 plus $1,000 or $11,000 divided by 2 or $5,500.

An annual return of 10% after a 52% income tax, would be equivalent to 10% divided by .48, or 20.8% before tax, or $1,140, or a return on-investment cost per year per employee of $28.50.

Thus adding the return-on-investment cost of $28.50 to the capital recovery cost of $22.50 gives a total cost per year per employee of $51.00.

Now, with this information before you, as summarized in Exhibit V, you are in a position to make an informed judgment decision as to whether the intangible benefits to be derived from this proposed expenditure are worth $51.00 per employee per year, or a total of 40 times that or $2,040 per year to the company.

Exhibit V

Proposed Expenditure:			
New Furniture for 40 People		$10,000	
Benefits:			
Improved Working Conditions		Intangible	
Improved Office Appearance		"	
Analysis:		Cost	
		Total	Per Employee
Estimated Life	10 Years		
Salvage Value	10% or $1,000		
Net Expenditure to Be Amortized	9,000		
Net Cost per Year		$900	$22.50
Average Outstanding Investment	$5,500		
Annual Return @ 20.8% (before tax)		1,140	28.50
Total Cost Per Year		$2,040	$51.00

However, with the use of a table (such as shown in Exhibit IV) of Average Annual Cost per dollar of capital expenditure, this calculation can be greatly simplified. For example, you would simply refer to the table:

Choose the line for an estimated life of ten years,

Choose the column for an estimated salvage value of 10%, and

Find that the Average Annual Cost for such an expenditure would be 20 and 35 hundredths cents per dollar, or, $2,035 for $10,000.

In other words, instead of the analysis shown in Exhibit V, you could substitute the Average Annual Cost of $2,035 or $50.90 per employee as determined by reference to the table.

You will note that this average annual cost of $2,035, as determined from the table, is slightly less than the $2,040 arrived at by our analysis. This is due to the fact that the mathematics behind the table are considerably more sophisticated than the arithmetic we went through. Whereas we took a simple average of the outstanding investment at the beginning and end of the ten-year period, the table reflects monthly cash flows. Also, as mentioned before, the table makes allowance for reduced income taxes resulting from a portion of the return being paid out in the form of tax-free interest. So actually the average annual cost derived from the table is more nearly accurate than that computed arithmetically.

But I digress. The point I want to make here is that even in those cases where the benefits of a proposed capital expenditure are primarily intangible, it is most helpful to know the annual cost of the expenditure when attempting to evaluate it. It is much more meaningful to say that this new furniture entails a cost of $2,035

per year, including a provision for adequate return on the investment, than to say only that it involves an outlay of $10,000.

Well, so much for the Average Annual Cost technique as it is used in evaluating capital expenditure proposals involving intangible benefits. As you can readily understand, this technique really comes into its own in evaluating proposals that are associated with tangible benefits of increased revenue, or reduced operating expense, or both.

Exhibit VI

PROPOSED CAPITAL EXPENDITURE

Description: 7 Sets of Flight-Time Data Processing Equipment

Proposed Expenditure (incl. Frt. & Taxes)	$73,026	
Estimated Useful Life	7 Years	
Estimated Salvage Value	10%	- 0 -
Average Annual Cost per $ (@ 10% Return)	$.2388	$.2450
Total Average Annual Cost " " "	$17,439	$17,891
Estimated Annual Expense Savings: (Salaries, Fringe Benefits, Materials, Services, Etc.)	$41,097	$41,097
Net Annual Saving (before Income Taxes)	$23,658	$23,206
Margin of Safety	58%	56%
Break-Even Average Annual Cost per Dollar	.5628	.5628
Break-Even Life	2.0 Yrs.	2.2 Yrs.
Indicated Return on Investment	38%	35%

Exhibit VI, shows a typical example of that type. It is a proposal to acquire new equipment --- in this case, data processing equipment accounting machines --- required to implement a new procedure involving substantial savings in operating expenses.

This proposal was to acquire seven sets of Flight-Time Data Processing Equipment. This would entail an expenditure, including freight and taxes, of $73,026. It was estimated that the equipment would have a useful life of seven years, and, at the end of that time, an estimated salvage value of 10% of its original cost. With this information in hand, it was a simple matter to refer to our Average Annual Cost table and determine that, including a 10% return on the funds outstanding, this expenditure would involve an average annual cost of 23.88¢ per dollar, or, for the total expenditure of $73,026, a total average annual cost of $17,439.

As pointed out before, the total average annual cost represents the annual amount required to cover both amortization or depreciation, and income taxes, as well as the 10% return. It therefore represents a total cost at the operating expense level, and may thus be compared directly with anticipated savings in other operating expenses. In this instance it was estimated that the procedures to be implemented by the acquisition of this equipment would result in savings in salaries, fringe benefits, materials, communications services, etc., totaling $41,097 per year. This was substantially greater than the Average Annual Cost, and indicated that the proposal would yield a net annual saving of $23,658 at the operating level after providing for a 10% return.

At this point I should like to repeat something I said earlier. For the purpose of this presentation, I am using an average annual cost table computed to yield 10% after taxes for a company whose capitalization consists of 60% equity, and 40% debt at an average interest cost to 4%. Please don't infer that United Air Lines has decided that 10% is the proper rate of return, nor that 4% debt amounting to 40% of its capitalization is representative of its capital structure.

These rates and ratios have been chosen arbitrarily and are used for illustrative purposes only.

So --- coming back to our example, it is quite obvious that on the basis of a 10% return and the assumed capital structure, this proposal was an attractive one. However, it should be recognized that three important factors in this calculation are estimates. As indicated by the check marks in the left margin of Exhibit VI , we estimated the salvage value, and we estimated the expense savings to be realized through the use of the new equipment. It behooves us, therefore, to make some attempt to evaluate the effect of possible errors in these estimates.

MARGIN OF SAFETY

First of all, with regard to the expected savings, it is quite helpful to compute a "margin of safety". (See Exhibit VI).

This margin of safety is simply the ratio of the net savings of $23,000, to the gross savings of $41,000. It indicates the degree to which the gross savings can decline without failing to cover the average annual cost of the equipment. In other words, actual savings in this instance could fall short of the estimate by 58% without cutting into the 10% return on the investment.

Now, the next estimate that we ought to evaluate is the estimated useful life. In addition to the question of the physical durability of the equipment, we should consider the possibility that technical developments, or new data requirements might make the equipment obsolete in less than the estimated seven years.

BREAKEVEN LIFE

A good way to evaluate the risk involved here, is to determine the "breakeven life", or the minimum time required for the accumulated savings to cover the total cost of the expenditure. This is done by recognizing that the proposal would still break even if the average annual cost were as high as the estimated gross savings of $41,000. Under these circumstances the average annual cost per dollar of the proposed expenditure would be $41,000 divided by $73,000, or $.5628. Taking this figure, then, and going back to the Average Annual Cost Table in Exhibit IV, we can determine what the corresponding break even life would be. Let me show you.

We are looking for a figure of .5628 in the 10% salvage value column. (See Exhibit IV) We find that it falls between the first and second lines. In fact it is so close to the second line that interpolation will give a corresponding life of 2.0 years. In other words, if the expected savings are realized, this equipment need last only 2.0 years to cover the total cost of the capital expenditure.

Now, how about the third estimate --- the estimated salvage value? What would be the effect if this estimate turned out to be too high? Well, we can assume for the sake of analysis that there is no salvage value, and with very little effort go through this whole calculation on the basis of a zero salvage value. I won't lead you through it because the process is exactly like what we have just gone through. But it is shown in the second column in Exhibit VI.

You will note that in this column we have made no change in the initial expenditure of $73,000, nor in the estimated life of seven years. But on the basis of a zero salvage value, instead of 10%, the Total Average Annual Cost increases to $17,891 instead of $17,439. This isn't much of an increase, and consequently the net annual savings go down only slightly from $23,658 to $23,206. Likewise the margin of safety goes down only slightly; and the breakeven life --- the minimum life required for the savings to cover the cost --- increases only slightly.

So at this point we have a fairly complete analysis of this proposal:

1. We have estimated that it will yield expense savings equivalent to $23,000 per year after allowing for a 10% return on the funds invested.
2. We have determined that the estimated gross savings can decline by more than 50% and still cover a 10% return on the investment.
3. Or, if looked at from another point of view, it will take only two years for the estimated savings to cover the cost of the equipment including a 10% return.

Obviously, on the basis of this analysis, this is an attractive proposal and might well be deserving of budget approval. However, there is one more point that we haven't mentioned.

It frequently happens that a company has available for commitment at any one time, only a limited amount of capital funds. It is quite common for a budget committee to have before it more desirable projects than it has funds to cover. Under these conditions it must pick and choose; it must ration its funds. And to do this effectively it needs some kind of ranking or rating system --- a profitability index, if you will --- that can be applied to the various proposals being considered. Such an index frequently takes the form of the estimated return on investment that can be expected from each project.

In our case of the data processing equipment, for example, we have determined that the estimated savings of $41,000 annually are more than enough to provide a 10% return. But we have not

determined what rate of return they actually represent. Is it 20% --- 25% --- 30%? We don't know at this point, but if we did, we should have an index figure that would enable us to compare this project with all the others under consideration.

And, as you probably suspect by now, this figure, too can be derived from our magic tables of "Average Annual Cost". It is shown at the bottom of Exhibit VI.

As you can see, it is 38% if we assume a 10% salvage value for the equipment at the end of 7 years; and 35% if we assume zero salvage value. Now, how did we get these figures? Let me show you.

On the third line from the bottom of Exhibit VI we show the "Break-Even Average Annual Cost per Dollar" for this expenditure. The figure is .5628. This means that if the cost equaled the savings of $41,000, the average annual cost would be 56.28¢ per dollar of initial expenditure.

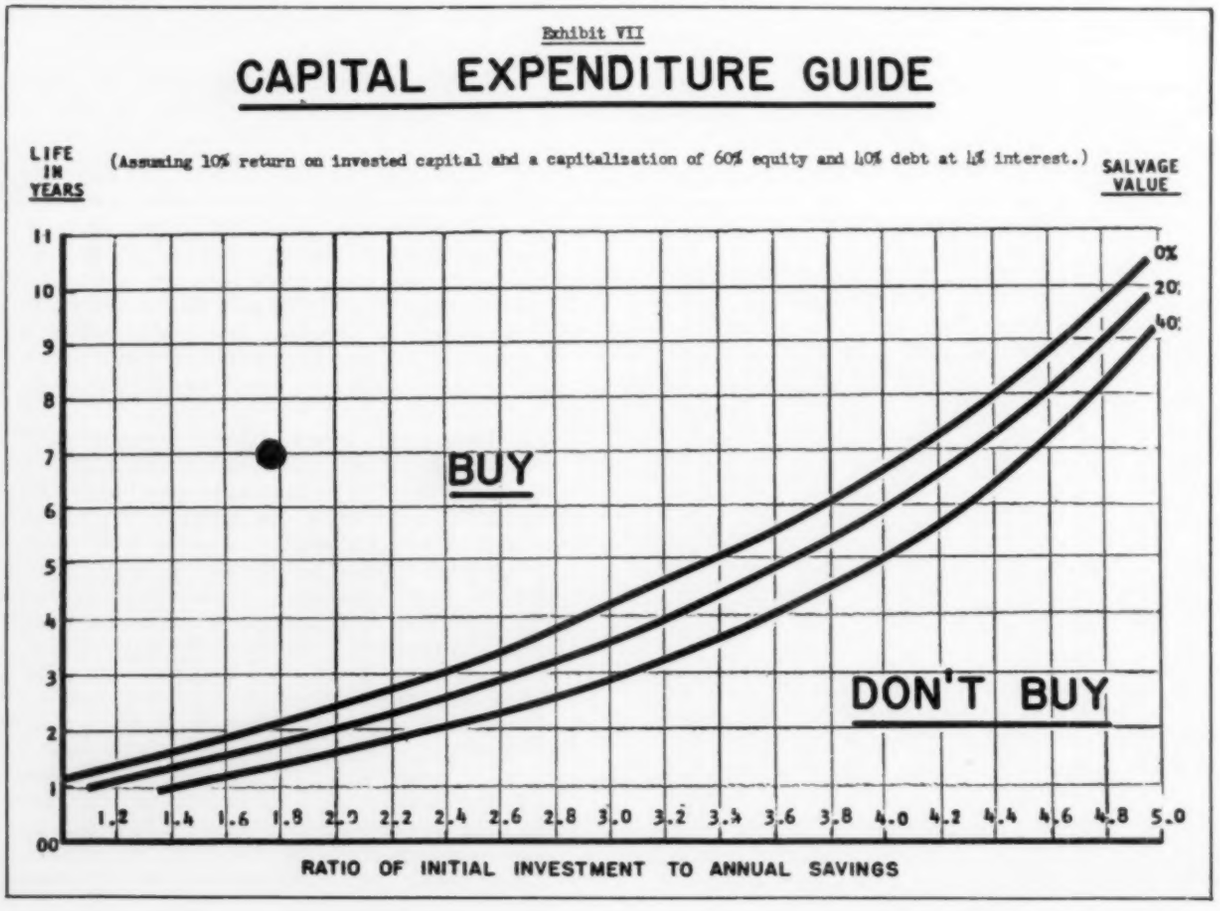
It was arrived at by dividing the estimated savings of $41,000 by the initial expenditure of $73,000. It therefore shows what the average annual cost per dollar of expenditure would be if the total annual cost were equivalent to the total savings.

Thus the figure of .5628 expresses the savings in terms of an equivalent average annual cost per dollar of initial expenditure. Taking this figure, then, and referring back to our tables --- assuming that we have set up a table for each of various different rates of return --- we have simply to page through them until we find a figure as close as possible to .5628 on the seven-year line, and in the 10% salvage value column. This we would find in the 38% table. Or, if we searched in the zero salvage value column, we would find it in the 35% table.

Thus, in Exhibit VI, we have completed our evaluation of this proposed capital expnediture for seven sets of flight time data processing equipment.

But now, I want to bring one more point to your attention. The concept of "Break-Even Average Annual Cost per Dollar or Initial Expenditure" and "Break-Even Life", shown on the second and third lines from the bottom of Exhibit VI, lend themselves very effectively to graphic portrayal. Take a look, for example, at Exhibit VII.

Exhibit VII



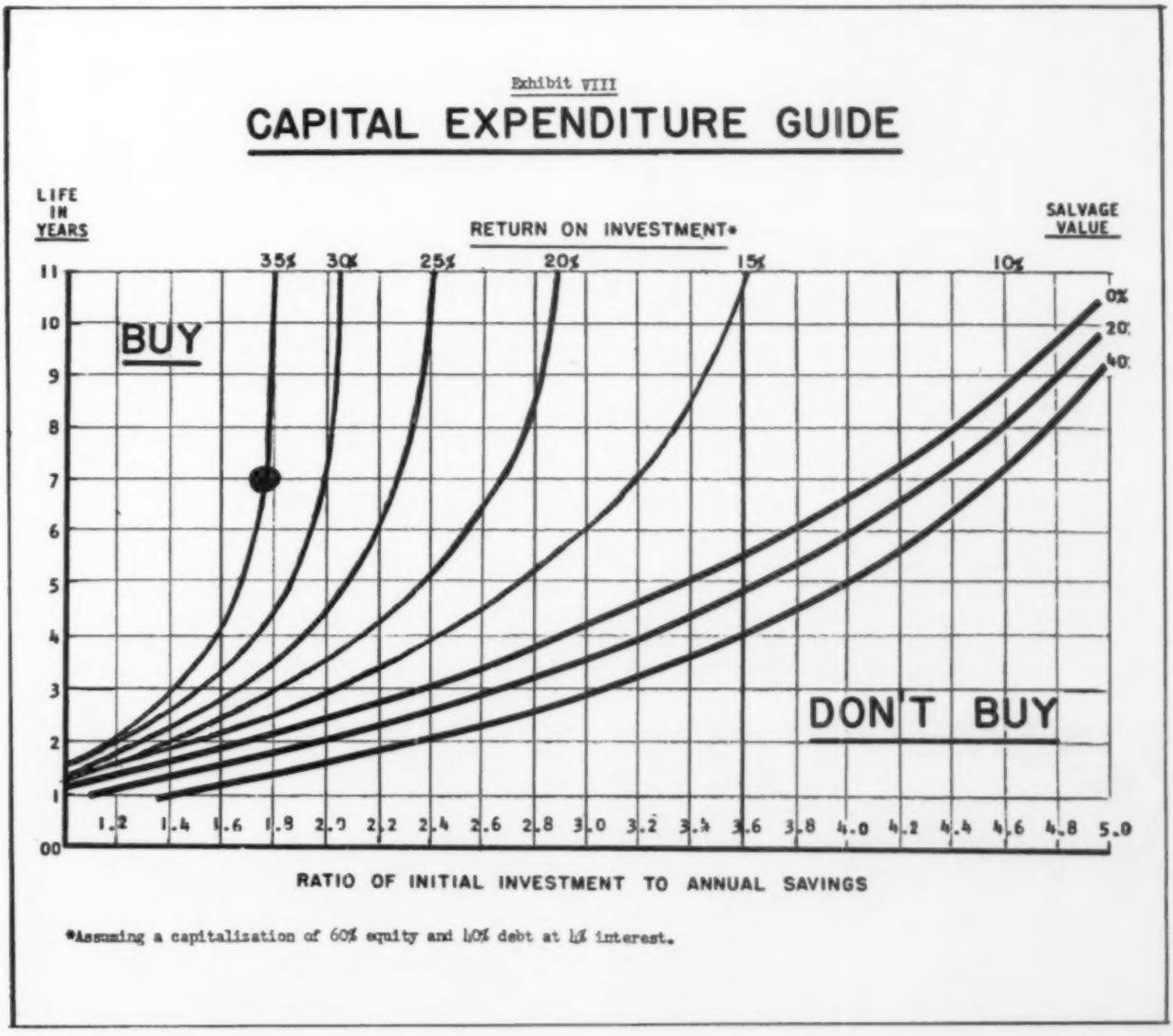
Here we have a graph which we have entitled, "Capital Expenditure Guide, assuming a 10% rate of return on invested capital..." Along the horizontal axis at the bottom we use a scale representing the ratio of the initial investment to the annual savings. And on the vertical axis we show the useful life in years. On this grid, then we plotted three lines showing the break-even life for each of three salvage value assumptions, namely, 0%, 20%, and 40%. Any proposed expenditure then, which falls above these lines will return more than 10% on the investment; anything that falls below, will not.

Our proposed data processing equipment, for example, is represented by the dot on the seven year line. You will remember that in this case the proposed expenditure was $73,000, and the estimated savings were $41,000. The ratio of initial investment to annual savings, therefore, was 73 ÷ 41 or 1.7. Thus, since the useful life was estimated at seven years, this proposal was plotted at 1.7 on the horizontal scale, and 7 years on the vertical scale. Its position on the graph shows that it is well above the break-even lines, and that therefore it will return considerably more than 10% on its investment. Furthermore, by dropping an imaginary line straight down from this point until it interesects the break-even lines, it can be seen that the life required to break-even is 2.2 years at 0% salvage value, 2.0 years at the estimated 10% salvage value, and, since the salvage value would probably be more like 20% or 40% if the life were as short as 2 years, the actual break-even life might well be more like one-and-a-half years.

Simple --- isn't it? Complicated in construction, perhaps, but certainly simple to use.

And now, if you'll bear with me, I have just one more chart to show you. It is exactly the same as Exhibit VII except that it has five more lines on it. It is shown in Exhibit VIII.

Exhibit VIII



You will note that five lines have been added to give an indication of the return-on-investment that is to be expected from projects that fall above the break-even lines. You will note, for example, that the point representing our expenditure for data processing equipment falls on the 35% line.

With the use of a chart of this kind, it is very simple to rate and rank any number of capital expenditure proposals by simply computing the ratio of the initial investment to the annual savings for each proposal, plotting it on the chart, and reading the indicated return-on-investment.

A chart of this kind is also very useful in making buy-or-rent decisions. In these cases the proposals can be plotted by regarding the contemplated annual rent (less any maintenance or service charges included therein) as the estimated annual savings to be achieved by the expenditure.

Well, there you have it: the technique which we refer to as the "Average Annual Cost" approach to the evaluation of capital expenditures. We think it is a practical approach.

CONCLUSION

In conclusion, let me say by way of summary, that we feel that this "Average Annual Cost" approach to capital expenditure budgeting has these advantages:

1. First of all, it gives full recognition to the time-value of money. In this respect it is like the discounted-cash-flow approach. It is unlike that approach, however, in that it does not discount future benefits to present value. Instead it does the reverse: it converts present outlay to future expense. This gives rise to its second important advantage, which is:

2. It provides a cost figure in all cases that can be evaluated against future benefits even though they be intangible in nature.

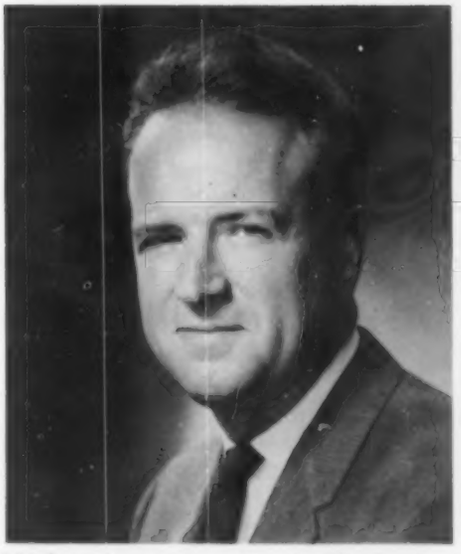
3. It gives a cost figure that is before taxes and is therefore directly comparable with other operating expenses, revenues and operating profits.

4. It gives full recognition to return-on-investment. In fact, it treats return-on-investment as if it were a before-tax cost.

5. And finally it can be made simple to use.

> Education is no longer thought of as a preparation for adult life, but as a continuing process of growth and development from birth until death.
>
> – STEPHEN MITCHELL

NEWS ABOUT MEMBERS



FRANK LONCAR, Budget Director of The Vendo Company and a member of the Kansas City Chapter has been appointed executive assistant to Spencer L. Childers, Vice-President in charge of operations. Frank joined Vendo in 1946 as Chief Cost Accountant and will retain responsibility for data processing. He has directed seminars for the American Management Association in both the U.S. and Canada. JAMES SELLER, JR., replaces Frank as Budget Director.

ROBERT F. HENCK of the New York Chapter has joined Nopco Chemical Corp of Newark, New Jersey as Budget Analyst. Bob will be responsible for the preparation of budgets and forecasts as well as for the compilation of financial analyses and special studies. He was formerly with Remington Rand Division of Sperry Rand Corp.

FRANK McARTHUR of the St. Louis Chapter is now known around the world. An article he wrote, which was published in Business Budgeting in January, 1959, has been reprinted in the magazine "Industrial Economist" published in Pakistan.

CHARLES P. REYNOLDS of Trailmobile Inc. (Cincinnati Chapter) has been elected Vice-President – Administration.

The New Mexico Chapter organizational meeting received good coverage in the Albuquerque Journal. ANTHONY J. MARSH, the Chapter President, had his picture inserted along with a a brief write-up on the new chapter. An open invitation was extended to prospective members.

HAROLD COLTMAN of the Los Angeles Chapter addressed the combined meeting of the five Southern California Chapters of the Systems and Procedures Association of America at their joint meeting on June 25th. The title of Hal's talk was, "Value Analysis in System and Procedures Work."

DICK HAWLEY of the San Francisco-Bay Area Chapter participated as a speaker at an NAA Discussion Forum held in San Francisco.

The new SKOKIE VALLEY CHAPTER'S initial publicity of the chapter activities received excellent coverage in their local newspapers. A statement of NSBB objectives was included in the write-up, along with a picture of the new officers. We present two pictures which were taken at the organization meeting. Old hands in NSBB affairs, Walt Verbeck, Don Bacon and LeRoy Kamin are shown with the newly elected President, Lyle Dallefeld, and the second shows the new chapter members.

HARRY P. KELLEY, who's recent article published in Business Budgeting is much in demand, took time out to participate as a speaker in an AMA orientation seminar entitled, "Profit Planning with Budgetary Control." The AMA seminar was held at Colgate University in July.

EARL G. (BUCK) MAUCK, former NSBB National President and a member of the Indianapolis Chapter has been appointed Personnel Director of Eli Lilly and Company.

KENT R. CRAWFORD, National Director of NSBB, has been appointed Assistant Director of the Accounting Interpretations Division of Eli Lilly and Company of Indianapolis. Kent will be responsible for budgets and the interpretation of financial and accounting data.

The most attractive and attention demanding meeting notices which came to our attention in the past year were distributed by the Detroit Chapter. We note that they were prepared and printed by Vickers Inc. so we suppose Roman Dodyk had a hand in this. Our congratulations to the Detroit Chapter.

1962 NATIONAL CONFERENCE AWARDED TO ST. LOUIS

A spirited campaign for the 1962 National Conference found the Board of Directors voting in favor of St. Louis. The coming line up then, is 1960 Cincinnati; 1961 Dallas and 1962 St. Louis. San Francisco has already tossed their hat in the ring for 1963.

The San Francisco Chapter held a Ladies' Night in June as the final 1958-1959 chapter meeting, and the report on this affair indicates a very successful program. Here's a brief description by AL ELLISON of the evening's activities.

Briefly: we hold Ladies' Night at the same location as we hold our regular meetings. Everything is the same, I.e., starting time, social hour, dinner, meeting, etc. Thus, the ladies get an idea as to what goes on at the monthly meetings. We do make two exceptions: 1) we have had, both years, a young lady accordionist. And as you can see from the program, we enjoyed a "songfest," which gets everybody in the swing. 2) we stay away from a budget topic (the ladies budget their husbands monthly paychecks, so they are "pros".) This year, Lionel Viales, one of our charter members, told us about his recent trip to Europe on behalf of the projected Ernest O. Lawrence Memorial Hall of Science, to be erected on the University of California campus at Berkeley, California. He told us about the cities in Europe which he visited, looking at similar Museums and Halls of Science in the old world. It was very interesting and entertaining.

DESK SETS AWARDED IN RECOGNITION OF OUTSTANDING CHAPTER NEWSLETTER AND BEST CHAPTER BROCHURE

The NSBB Executive Board decided to give public recognition to the Chapter which in the opinion of the judging committee (Editor and Circulation Manager of Business Budgeting) published the outstanding newsletter in the previous chapter year and also a like award to the chapter distributing the best chapter brochure.

A desk set was awarded to AL FOY, President of the Los Angeles Chapter, for the outstanding chapter newsletter. The newsletters were judged as to style and appearance, frequency of issue and content.

A similar award was presented to LEW LANDRETH, President of the Chicago Chapter for the excellence of that chapter's brochure. Judging here considered general appearance, announcements (including National Conference), program, completeness of membership roster and company listing.

Awards will be made at the next National Conference also, so let's see what can be done to improve our internal communications.

EAST TO WEST WITH FOUR NEW CHAPTERS

PITTSBURGH CHAPTER

GEORGE E. BLANKENBUEHLER
HARRY E. FISCHBAUGH
RALPH B. HORNE
L.V. LEGGATE
ROBERT G. LAMBERT
RICHARD E. AUSTIN
WILLIAM JOSEPH AHEARN
HERBERT A. BEHR, JR.
FRANK M. BRETTHOLLE
JAMES R. DOUGHERTY
CHARLES L. DUNCAN
EDWARD F. FRANZ
CHARLES W. FREED
EDWARD H. KOCH
JOHN J. O'CONNOR, JR.
V. J. POREMBA
NORVELLE J. SOWERS
RICHARD A. VOLLMER
WILLIAM F. YOUNG
ODDIE ZINSMASTER, JR.

SKOKIE VALLEY CHAPTER

JEROME S. LEVITON
ROBERT TRANTER
PRESTON HELLER, JR.
ROBERT J. PRINGLE
PAUL W. HYLBERT
ARMAND A. LANDERGHINI
EDWIN G. CARLSON
W. B. WILLIAMS
RALPH M. HOGAN
RALPH J. VONESH
WILBERT E. HARTMANN
JOHN J. CARDINAL
CARLTON N. CHANDLER
THEODORE F. WEBER
FRANK M. OZMUN
MILTON HEUBSCH
JOHN F. ANDREWS
J. ROBERT GETTEL
WILLIAM L. JACKSON
ROBERT E. KARGACOS
LYLE E. DALLEFELD
THOMAS B. KITTELL
WILLIAM B. WELSH
WALTER P. WEBER
EUGENE R. SWEDO
RAYMOND ODDI
CLIFFORD H. KUEHN
ARTHUR C. BERGO
ROBERT F. ADAMS

PEORIA AREA CHAPTER

RAYMOND B. MUZZY
THOMAS KRAUSE
THOMAS WRIGLEY, JR.
RAY POULTON
CLARENCE H. JACKMAN
FRANCIS E. STALEY
CLAYTON L. BOYD
JOHN W. GALVIN
JOHN J. JACOBS

NEW MEXICO CHAPTER

ANTHONY J. MARSH
LESLIE G. HAWKINS
FREDERICK C. SANDER
ROBERT ALEXANDER SMITH
THEODORE W. HORINE
RICHARD F. EAGLE
RICHARD R. MALONE
FRANK J. TAYLOR

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in SESSION at MINNEAPOLIS

Past President
Charles Eckelkamp

President
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at MINNEAPOLIS